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PATENT APPLICATION

RESPONSE UNDER 37 CFR §1.116 EXPEDITED PROCEDURE **TECHNOLOGY CENTER ART UNIT 1772**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Hideyuki KIMURA et al.

Application No.: 09/674,077

Filed: October 26, 2000

Group Art Unit: 1772

Examiner:

M. Patterson

Docket No.:

107714

INSERTED-BONDED CYLINDRICAL ARTICLES, AND A MOLDING METHOD For:

AND A MOLDING APPARATUS THEREFOR TECHNICAL FIELD TO WHICH THE

INVENTION PERTAINS

REQUEST FOR RECONSIDERATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reply to the October 1, 2004 Office Action, reconsideration of the rejection is respectfully requested in light of the following remarks.

Claims 1-6, 12-14 and 21-23 are currently pending.

The Office Action rejects claims 1-2 and 21-22 under 35 U.S.C. §103(a) over Japanese Patent No. 6246777 to Suzuki et al. (Suzuki). This rejection is respectfully traversed.

Claim 1 recites, inter alia, the mark is positioned at the inner surface of the cylindrical molded body while being inwardly apart from the upper end of the insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert.

Such an insertion-molded cylindrical article is nowhere taught or suggested by the cited reference.

That is, as shown in Applicants' Fig. 5, the injection gate opening 19a of the molding mold in the cylindrical article-molding portion is provided at the position inwardly spaced from the upper end of the insert 32 and at a position corresponding to a position on the inner surface that is covered by the insert 32, and the mark is made from injecting the molten resin into the cavity through the gate opening 19a and insertion-molded therein. By so doing, the insert is pushed and closely fitted to the inner surface of the outer mold unit by the pressure of the resin. Therefore, the molten resin is prevented from going onto the surface of the label (see page 17, lines 9-25).

In contrast to the claimed invention, Suzuki relates to manufacturing a compound container by integrating a thermoplastic resin injected from runners 32 with a blank board 103 (alleged to correspond to the insert) using a split mold. As described in paragraph [0018] and shown in Fig. 4, the blank board 103 pre-curved by winding around a core 31 is placed at a predetermined position in a cavity 51. Then, as shown in Fig. 5, a molten thermoplastic resin is injected in the cavity 51 through the runners 32 from an injection gate 41. As a result, a pillar part 102a, a flange 102b, a shoulder 102c, and a screw thread opening 102d are formed. At this time, the blank board 103 is integrated by <u>fusion</u> with the thermoplastic resin structuring the pillar part 102a, the flange 102b and the shoulder 102c at ends 103a, the lower opening end 103b and the upper opening end 103c. In other words, the molten resin is <u>not</u> injected <u>behind</u> the blank board 103, and the blank board 103 becomes the sidewalls of the container.

In Suzuki, the runners 32 are provided at the screw thread opening 102d and thus, as admitted by the Office Action, Suzuki does not disclose that the mark is positioned at the inner surface of the cylindrical molded body while being inwardly apart from the upper end of the

insert in an axial direction and at a position corresponding to a position on the inner surface that is covered by the insert. However, the Office Action then asserts that it would have been obvious to provide additional runners at different locations along the cavity, depending on the desired number of connection points, by relying Suzuki's disclosure at paragraph [0011] that two or more runners 32 can be drilled in the upper part of the core 31. This is where two runners 32 shown in the figures are located.

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However, as asserted in the July 21, 2004 Amendment, although Suzuki very briefly mentions using two or more runners, Suzuki is silent regarding any position of the runners other than at a top position. In addition, Suzuki specifically teaches that the runners 32 are drilled in the <u>upper part of the core 31</u> and clearly shows what that means.

The Office Action merely states that one of ordinary skill in the art would recognize the utility of providing for additional runners which connect the injection gate with the cavity at locations which include locations which are covered by the insert (i.e., blank board 103), and are at positions inwardly apart from the upper end of the insert (i.e., blank board 103), depending on the desired number of connection points between the injection gate and the cavity.

However, the Office Action does <u>not</u> provide any motivation, such as specific advantages, for one of ordinary skill in the art to provide the runners <u>at different locations</u>, specifically at the inner surface of the cylindrical molded body while being inwardly apart from the upper end of the bland plate 103 in an axial direction and at a position corresponding to a position on the inner surface that is covered by the blank board 103. In addition, Suzuki does not recognize the problems solved by the claimed invention or achieve the above-described advantages of the claimed invention. That is because Suzuki does not place any injected material behind the insert 103 as the insert <u>is</u> the body of the container. Because only Applicants' disclosure teaches such a feature, such an assertion would have to rely on

hindsight knowledge gained from Applicants' disclosure, and such an assertion based on hindsight knowledge is improper. Further, it is not logical, and therefore not suggested, based on Suzuki's structure.

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Furthermore, if the runners 32 are provided, as suggested by the Office Action, at the inner surface of the cylindrical molded body while being inwardly apart from the upper end of the blank board 103 in an axial direction and at a position corresponding to a position on the inner surface that is covered by the blank board 103, the runners 32 would have to be provided at a very narrow upper opening end 103c where the molten thermoplastic resin is integrated with the blank board 103 as shown in Fig. 3. It would be extremely difficult for one of ordinary skill in the art to accurately define the width created at the fusion of the fabrication section (cap) 102 and the body 103 and accurately provide the runners 32 in such a width. Furthermore, even if the runners 32 are provided at the upper opening end 103c, it would not be "inwardly away form the upper end" of the blank board 103, but rather it would be at the upper end of the blank board 103. In addition, if the runners 32 are provided at the location suggested by the Office Action, the injected molten resin would have to flow upwardly, which is not desirable. Accordingly, one of ordinary skill in the art would not have been motivated to add or relocate the runners at upper opening end 103c.

Moreover, as discussed in paragraph [0005] of Suzuki, conventionally there are problems with containers having a screw thread opening, such as a part that protrudes outside of the container, that the thermoplastic resin integrated with a blank board interferes when removing from the mold, and the object of Suzuki is to overcome such problems. If the runners 32 are provided inwardly apart from the upper end of the blank board 103 and at a position corresponding to a position on the inner surface that is covered by the blank board 103 as suggested by the Office Action, it would teach away from the teaching of Suzuki and make Suzuki's teaching unsatisfactory for its intended purpose.

At least for the reasons discussed above, Applicants respectfully assert that Claim 1 is patentably distinct form Suzuki.

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Claims 2, 21 and 22 are allowable at least for their dependence on allowable claim 1, as well as for the additional features they recite. For example, claim 22 recites that the mark is positioned only at the inner surface of the cylindrical molded body while being inwardly apart from the upper end of the insert in the axial direction and only at a position corresponding to a position on the inner surface that is covered by the insert. However, as discussed above, Suzuki does not teach or suggest this feature.

Therefore, withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 3-6, 12-14 and 23 under 35 U.S.C. §103(a) over Suzuki in view of Japanese Patent No. 03286815 assigned to Asahi Chemical Industry Co., Ltd. (Asahi Chemical). This rejection is respectfully traversed.

Claim 3 recites, *inter alia*, that a molten resin is injected through an injection gate opening toward a molded body inner surface at a position inwardly apart from said upper end of the insert in an axial direction and at a position corresponding to a position on the molded body inner surface that is covered by the insert.

As discussed the above in connection with claim 1, Suzuki does not teach or suggest that a molten resin is injected through the runners 32 toward the molded body inner surface at a position inwardly apart from the upper end of the blank board 103 in an axial direction and at a position corresponding to a position on the molded body inner surface that is covered by the blank board 103.

Asahi Chemical is relied only on its teaching of curing thermoplastic resin and does not teach or suggest the feature missing in Suzuki. Therefore, Asahi Chemical does not overcome the deficiency, and thus, Suzuki and Asahi Chemical do not achieve the claimed invention.

Moreover, the Office Action relies on Asahi Chemical for curing the thermoplastic resin, which Suzuki allegedly lacks, and states that the motivation for combining Suzuki and Asahi Chemical is to make a container having a good appearance as taught by Asahi Chemical. However, it is obvious that Suzuki teaches curing the thermoplastic resin because Suzuki teaches in Fig. 9 and paragraph [0022] that a <u>fabricated</u> compound container is taken out from the core 31. Therefore, one of ordinary skill in the art would not have been motivated to combine Asahi Chemical with Suzuki for a teaching already disclosed by Suzuki.

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At least for these reasons, Applicants respectfully submits that claim 3 is patentably distinct from the applied prior art.

Claims 4-6, 12-14 and 23 are allowable at least for their dependence on allowable claim 3, as well as the additional features they recite. For example, claim 23 recites that the molten resin is injected through the injection gate opening toward the molded body inner surface only at a position inwardly apart from the upper end of the insert in the axial direction and only at a position corresponding to a position on the molded body inner surface that is covered by the insert. However, as discussed above, the applied prior art does not teach or suggest this feature.

Therefore, withdrawal of this rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6, 12-14 and 21-23 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted:

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Date: December 3, 2004

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